REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 14, 18, and 25 are amended herein. Claims 1-28 are currently pending.

II. Claim Rejections Under 35 U.S.C. 103:

Claims 1-10, 12-17, and 25-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. US 2002/0010865 (Fulton et al.) in view of Applicant Admitted Prior Art (AAPA).

Fulton et al. disclose a method and apparatus for remote office access management. A remote user 100 dials a number associated with a remote office access server to establish a connection between the user and the remote office access server (Fig. 1). User identification information is passed from the remote office access server to a security server 130, which authenticates the user information. If access is granted, the security server returns the authentication decision to the remote access server and data is permitted to pass between the user and the customer network (LAN) 150. Fig. 2 illustrates details of the remote office access manager network 110 of Fig. 1. The remote office access manager network includes a remote office access manager security server 178 which is used for AAA (see, paragraphs 0027 and 0031-0032).

Claim 1 has been amended to clarify that the virtual home gateway is in communication with a plurality of virtual private networks and that authentication of the remote user is performed without contacting an AAA server associated with the virtual home gateway.

Fulton et al. do not disclose providing authentication in a virtual private network (or local area network) by sending a request to authenticate to a remote user to an AAA server located within the virtual private network (or local area network). In contrast to applicants' invention, Fulton et al. disclose AAA traffic flow to a server located within a

remote office access manager network, which is in communication with a local area network (LAN). AAA is performed at a remote office access network in direct communication with the remote user. Furthermore, since the authentication is performed at the remote office manager network and not the LAN to which the remote user wants to establish a connection with, there is no need to associate the remote user with the LAN to perform authentication. The authentication is thus performed in a network connected directly to the user (see, for example ROAM network in Fig. 1 which contains the AAA server). Authentication of the user is performed by contacting the AAA server associated with the ROAM. There is no virtual home gateway that sends a request to an AAA server located within a different network.

Accordingly, claim 1 is submitted as patentable over Fulton et al.

Claims 2-13, depending either directly or indirectly from claim 1, are submitted as patentable for at least the same reasons as claim 1.

Claims 2 and 3 are further submitted as patentable over Fulton et al., which do not show or suggest receiving a virtual private network ID and address of an AAA server of the virtual private network. As discussed above, the remote user is not associated with a virtual private network and the AAA server is not located within a virtual private network.

Furthermore, claim 3 requires the virtual private network ID to bind a profile of the virtual private network to a routing table of the virtual home gateway. In rejecting claim 3, the Examiner refers to paragraphs 0025 and 0070 of Fulton et al. Paragraph 25 describes how a network routing element, separate from the remote office access network and customer network (see Fig. 1), is used for routing to an appropriate customer network. Thus, there is no need to bind a profile of the customer network to a routing table of the remote office access network.

Fulton et al. do not route an authentication request using a customer routing table in the customer network, since the routing is performed based on routing information not obtained from the customer network. Thus, claim 6 is submitted as patentable over Fulton et al. and the AAPA.

Claims 8, 9, and 10 are further submitted as patentable over Fulton et al. which do not disclose sending an accounting request to the customer network. Also, Fulton et al. do not send different accounting information to a virtual private network's AAA server and service provider's AAA server, as set forth in claim 10.

Claim 14 is directed to a computer program product for providing authentication in a virtual private network having an AAA server and is submitted as patentable for at least the reasons discussed above with respect to claim 1.

Claims 15-17, depending directly from claim 14, are submitted as patentable for the same reasons as claim 14. Claim 17 is further submitted as patentable for the reasons discussed above with regard to claim 3.

Claims 11 and 18-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fulton et al. in view of U.S. Patent Publication No. 2002/0075844 (Hagen).

As noted by the Examiner, Fulton et al. do not teach identifying a virtual private network based on a domain name.

Hagen discloses a system and method for integrating public and private network resources for optimized broadband wireless access. A network access server is associated with each wireless, radio frequency communication device and provides an interface between the wireless, mobile terminals and the private network. Hagen does not remedy the deficiencies discussed above with respect to the primary reference. Furthermore, Hagen does not show or suggest associating a remote user with a virtual private network by identifying the virtual private network based on a domain name, as set forth in claim 11. In contrast to using a domain name to identify a virtual private network, Hagen discloses using the same wireless domain name for all WAP-containing networks (paragraph 0049). Thus, Hagen teaches away from associating a remote user with a specific virtual private network by using a domain name to identify the desired virtual private network.

With regard to claim 18, the Examiner notes that Fulton et al. do not teach a processor operable to look up the address of the virtual private network AAA server based on information received from the remote user. In rejecting claim 18, the Examiner refers

to paragraphs 0061 and 0175 of Hagan. Paragraph 0061 describes a NAS integrated in a wireless phone. Paragraph 0175 describes a registration process which involves verifying information provided on a registration form by a subscriber. A NAS is used to verify fields entered by a user on a registration form. After completing the registration process data is transmitted to the NAS. There is no teaching of a processor operable to look up the address of a virtual private network AAA server based on information received from a remote user.

Accordingly, claim 18 is submitted as nonobvious over Fulton et al. and Hagen. Claims 19-24, depending either directly or indirectly from claim 18, are submitted as patentable for at least the same reasons as claim 18.

Claim 25 is a system claim corresponding to the method of claim 1 and is submitted, along with dependent claims 26-28, as patentable for the reasons discussed above with respect to claim 1.

III. Conclusion

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,

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